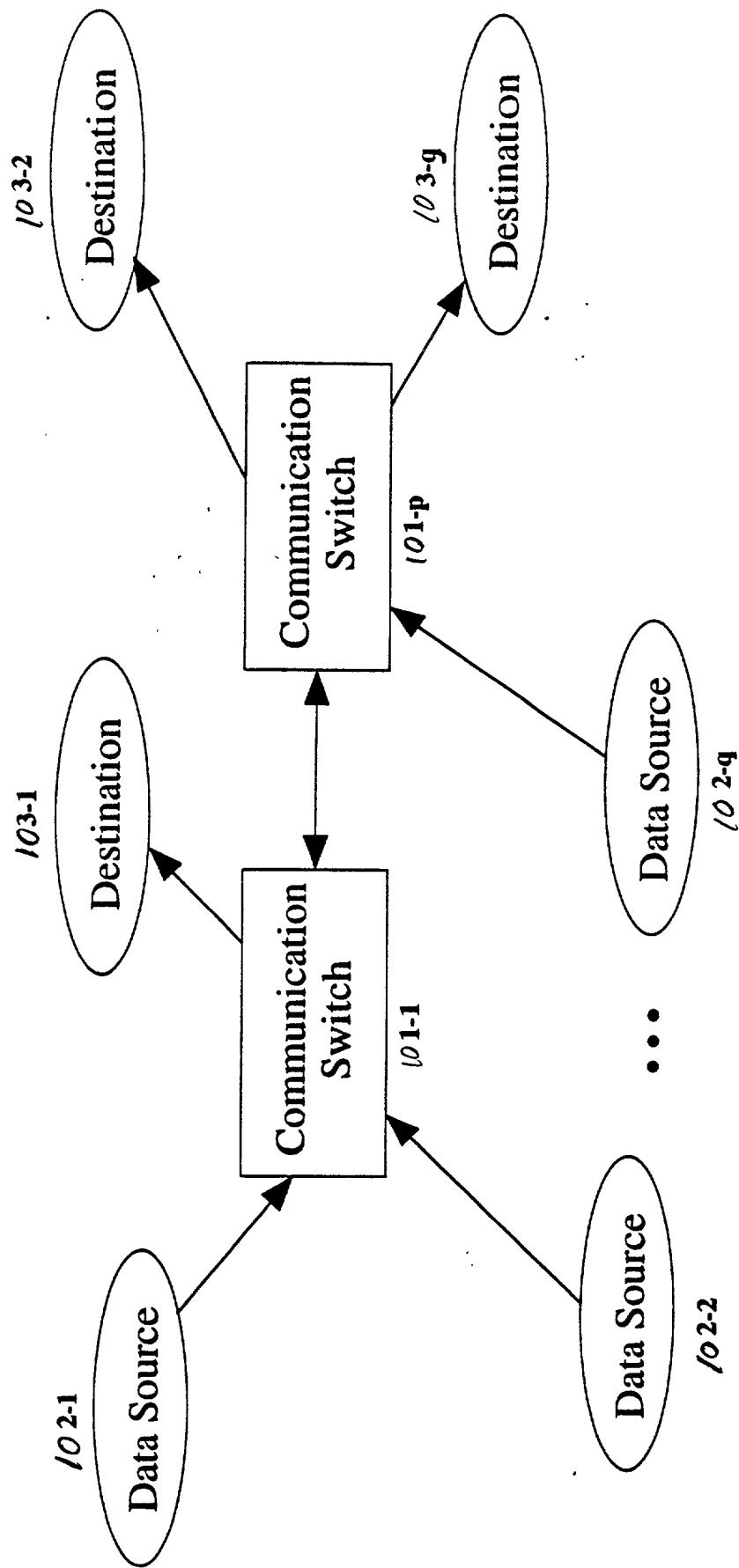


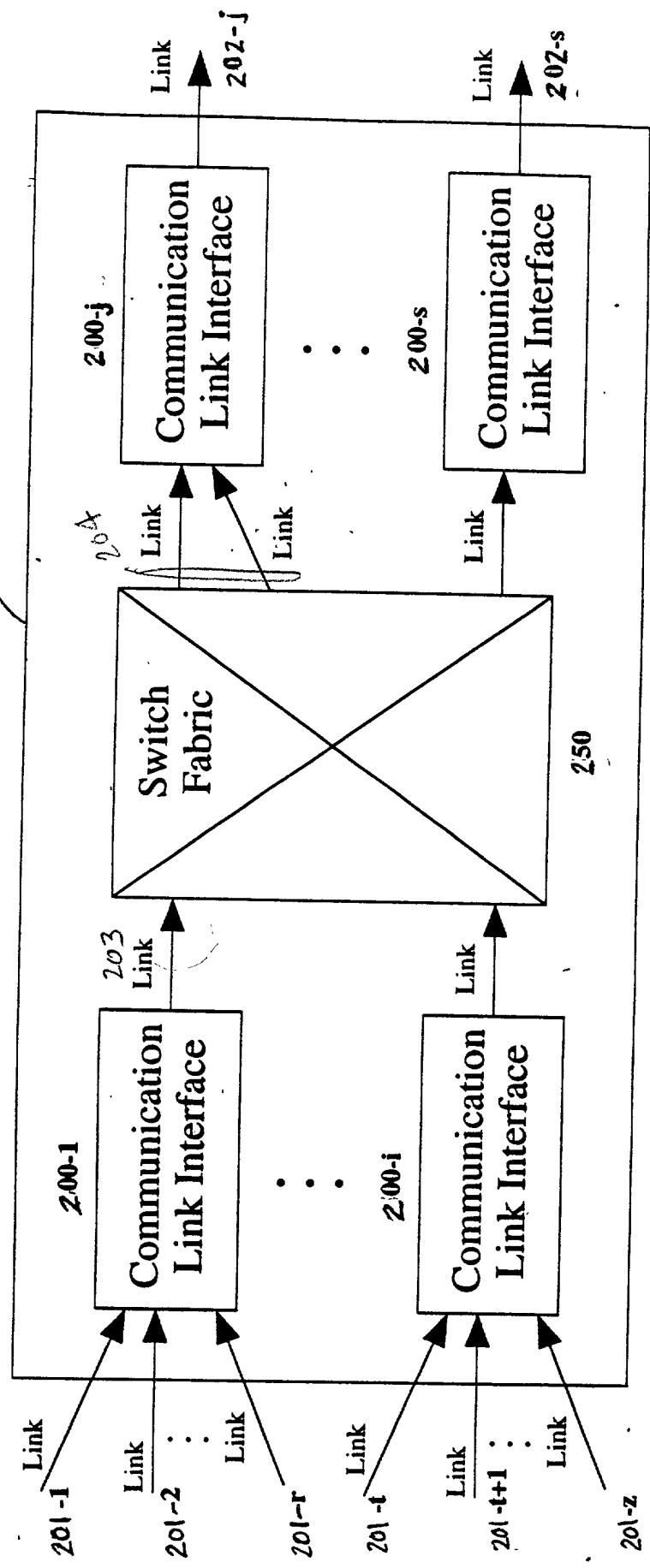
Fig. 1



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Fig. 2



```

1 if (flow i is newly backlogged)
2    $F_i^k \leftarrow \frac{l_i^k}{\rho_i}$ 
3     Append i to the tail of the linked list
4 else /* A packet of i has just been transmitted */
5    $F_i^k \leftarrow F_i^{k-1} + \frac{l_i^k}{\rho_i}$ 
6   if ( $F_i^k \geq T_Q$ )
7      $F_i^k \leftarrow F_i^k - T_Q$ 
8     Conclude visit to flow i
9 else
10    Keep servicing flow i

```

Fig 3A

```

1  $F_i^k \leftarrow F_i^{k-1} + \frac{l_i^k}{\rho_i}$ 
2 if ( $F_i^k \geq T_Q$ )
3  $F_i^k \leftarrow F_i^k - T_Q$ 
4 Conclude visit to flow i
5 else if (flow i is still backlogged)
6 Keep servicing flow i

```

Fig. 3B

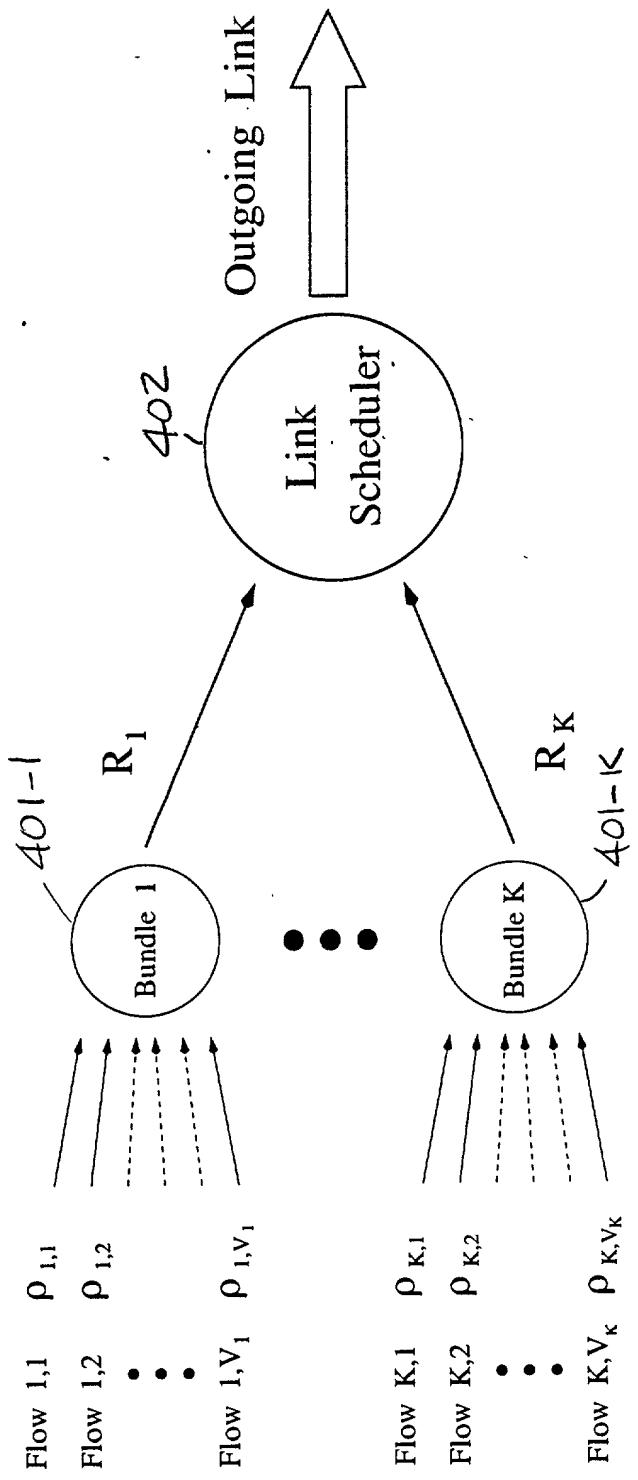


Fig. 4

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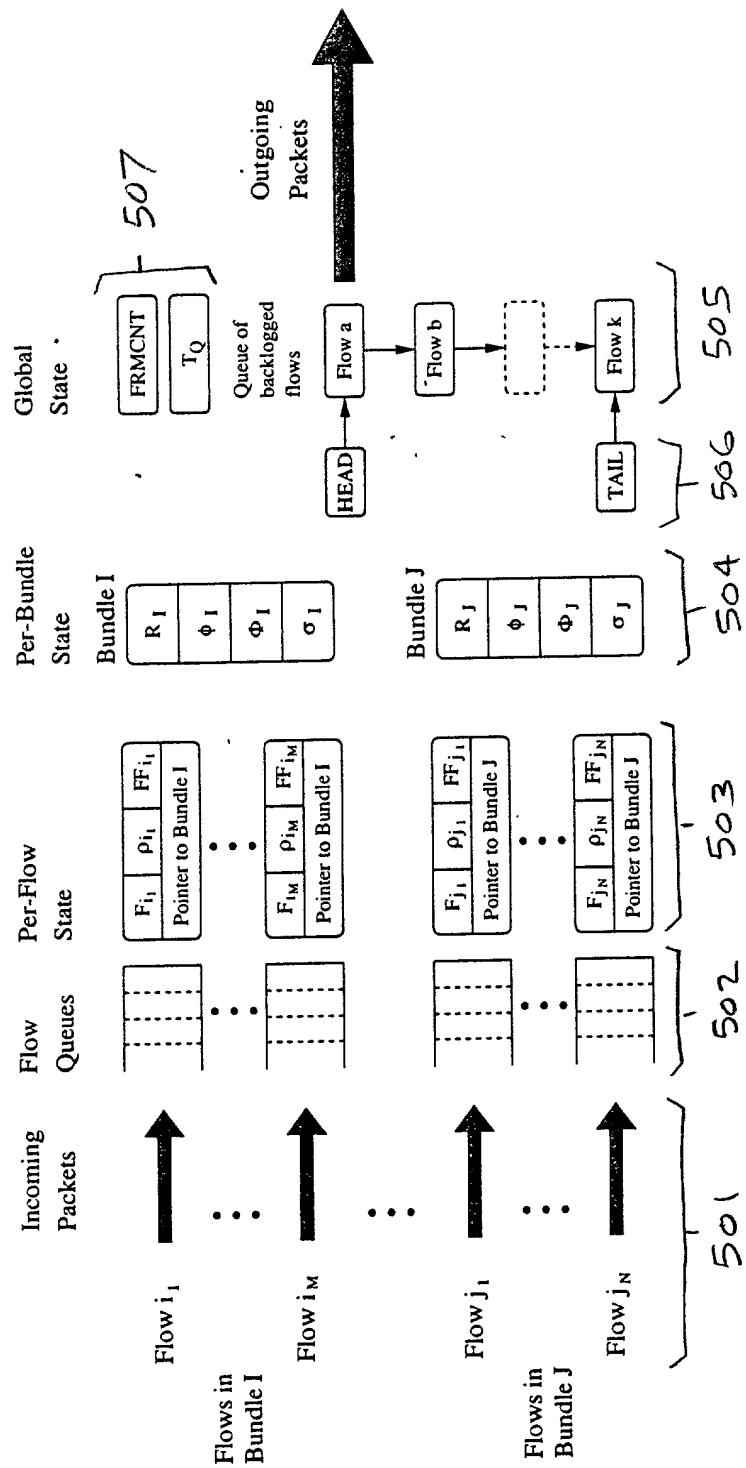
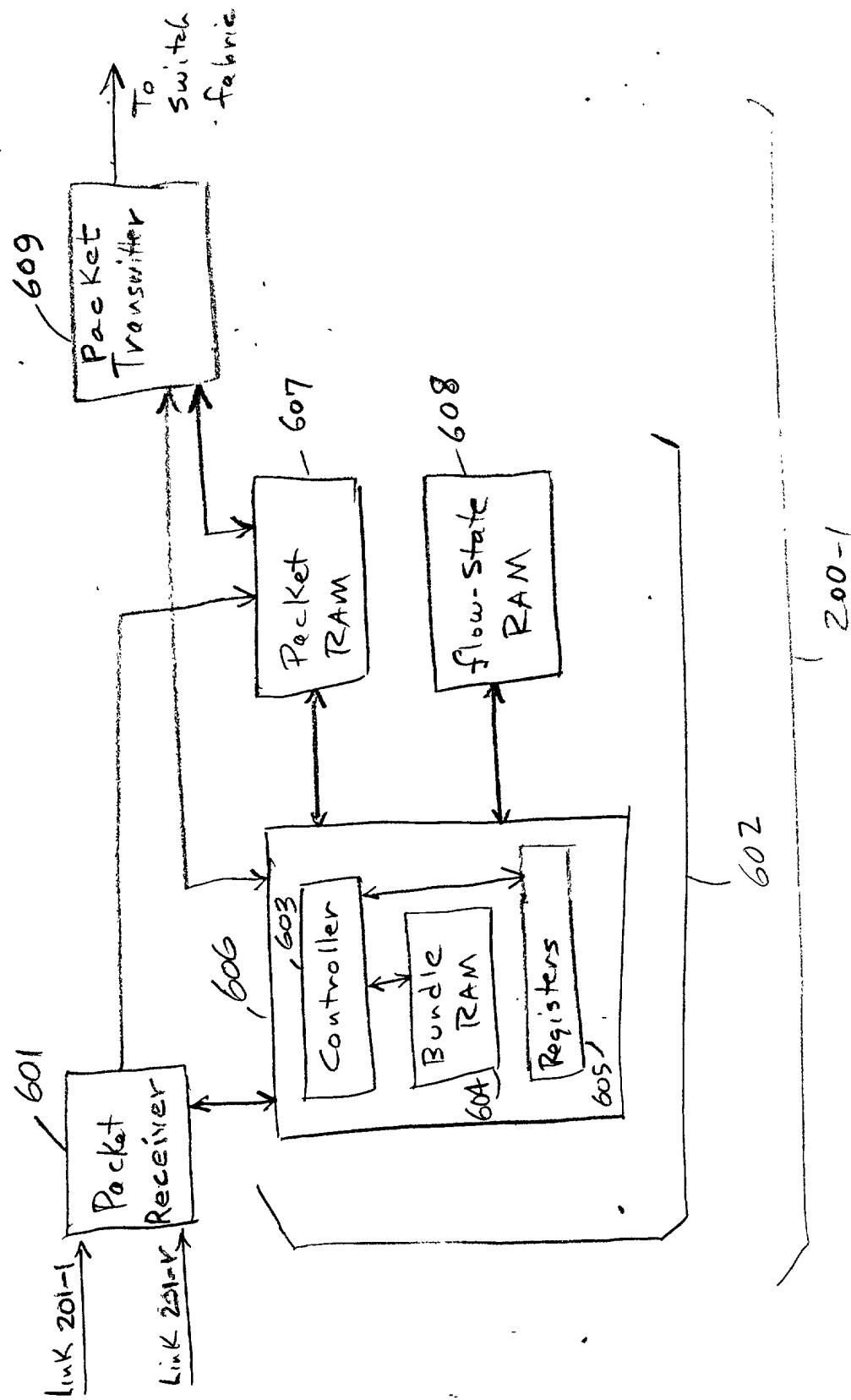


Fig. 5

Fig 6



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F.M. Chassis 23-1-N-11-11-

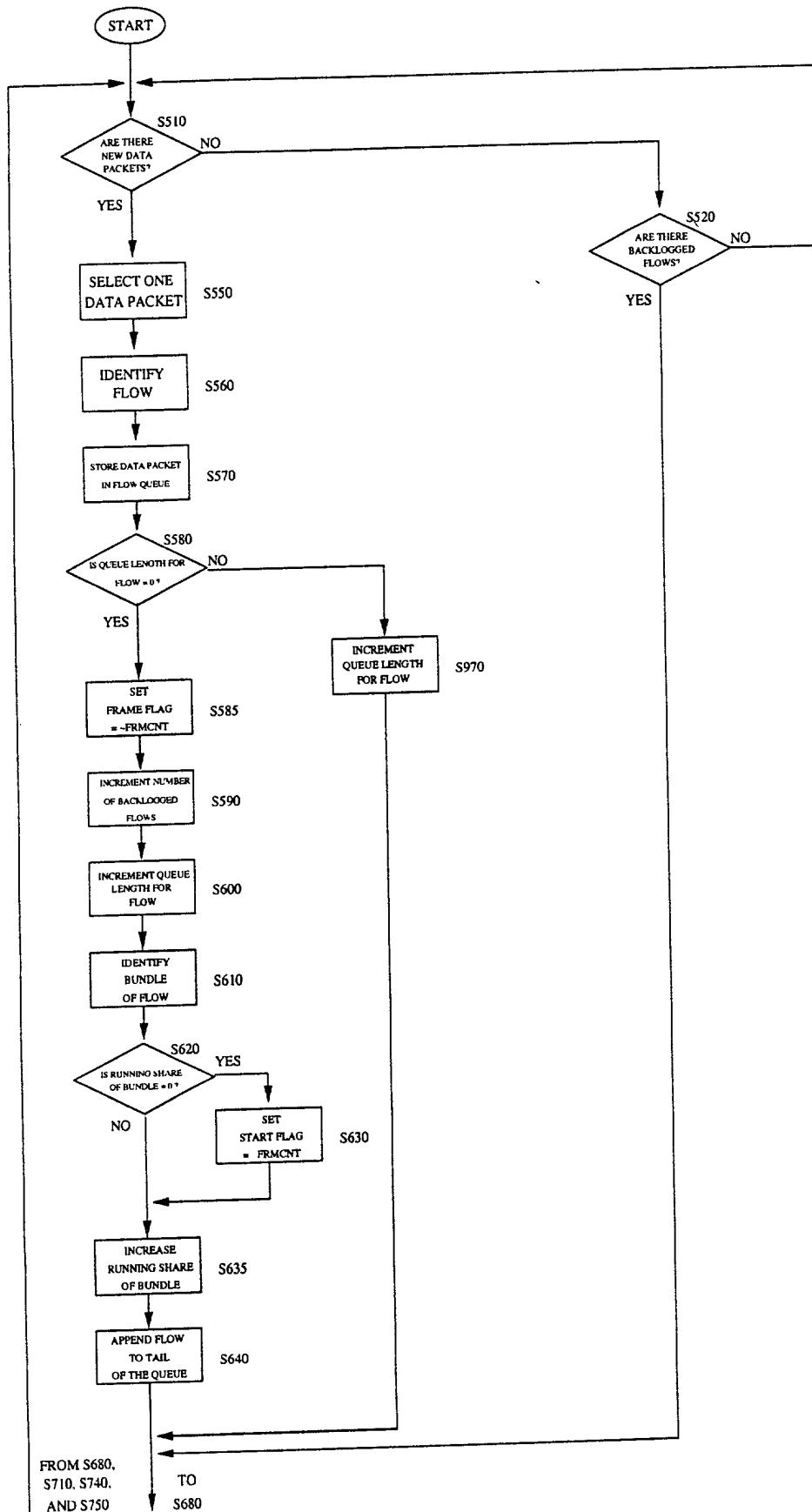


Fig. 7.A

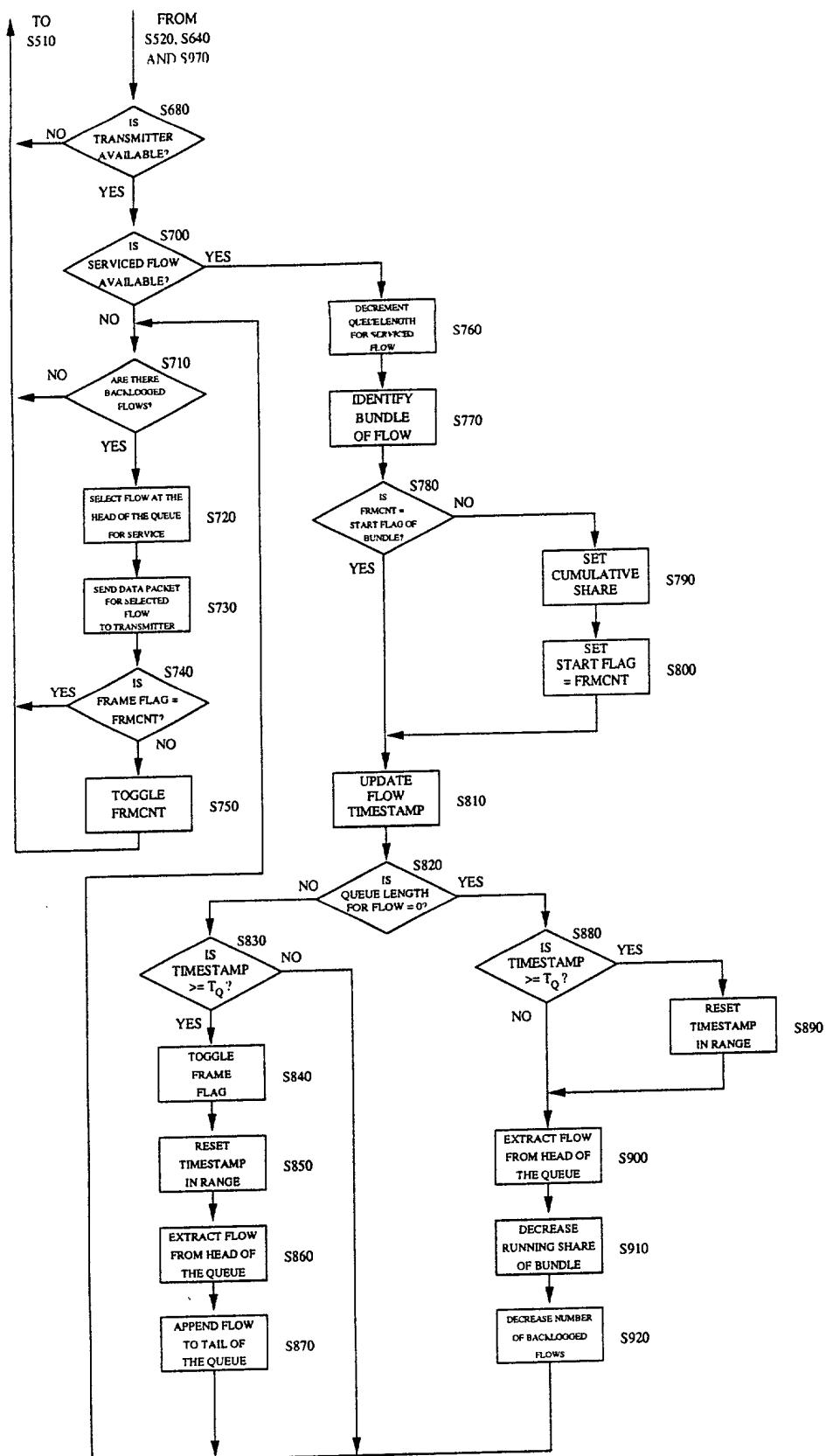


Fig. 7.B

Fig. 8

```
1 Identify flow  $i$  currently at the head of the linked list
2 Identify bundle  $I$  of flow  $i$ 
3 if ( $FF_i \neq FRMCNT$ )
     $FRMCNT \leftarrow \neg FRMCNT$ 
5 Prepare head-of-the-queue packet  $p_i^k$  for transmission
6 if ( $\sigma_I \neq FRMCNT$ )
7    $\Phi_I \leftarrow \phi_I$ 
8    $\sigma_I \leftarrow FRMCNT$ 
9    $F_i^k \leftarrow F_i^{k-1} + \frac{l_i^k}{R_I} \cdot \frac{\Phi_I}{\rho_i}$ 
10 if ( $F_i^k \geq T_Q$ ) /* Frame over for flow  $i$  */
11    $F_i^k \leftarrow F_i^k - T_Q$ 
12    $FF_i \leftarrow \neg FRMCNT$ 
13 Extract flow  $i$  from head of linked list
14 if (Flow  $i$  is still backlogged)
15     Append flow  $i$  to tail of linked list
16 else /* Flow  $i$  is getting idle */
17    $\phi_I \leftarrow \phi_I - \rho_i$ 
18 else if (Flow  $i$  is getting idle)
19   Extract flow  $i$  from head of linked list
20    $\phi_I \leftarrow \phi_I - \rho_i$ 
```